

## Census 2000 PHC-T-2. Ranking Tables for States: 1990 and 2000

**Table 1. States Ranked by Population: 2000**

Note: 1990 populations shown in this table were originally published in 1990 Census reports and do not include subsequent revisions due to boundary or other changes.

Source: U.S. Census Bureau

Internet Release date: April 2, 2001

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see

<http://factfinder.census.gov/home/en/datanotes/expplu.html>.

Rank	Area	Census Population		Change, 1990 to 2000	
		April 1, 2000	April 1, 1990	Numeric	Percent
1	California	33,871,648	29,760,021	4,111,627	13.8
2	Texas	20,851,820	16,986,510	3,865,310	22.8
3	New York	18,976,457	17,990,455	986,002	5.5
4	Florida	15,982,378	12,937,926	3,044,452	23.5
5	Illinois	12,419,293	11,430,602	988,691	8.6
6	Pennsylvania	12,281,054	11,881,643	399,411	3.4
7	Ohio	11,353,140	10,847,115	506,025	4.7
8	Michigan	9,938,444	9,295,297	643,147	6.9
9	New Jersey	8,414,350	7,730,188	684,162	8.9
10	Georgia	8,186,453	6,478,216	1,708,237	26.4
11	North Carolina	8,049,313	6,628,637	1,420,676	21.4
12	Virginia	7,078,515	6,187,358	891,157	14.4
13	Massachusetts	6,349,097	6,016,425	332,672	5.5
14	Indiana	6,080,485	5,544,159	536,326	9.7
15	Washington	5,894,121	4,866,692	1,027,429	21.1
16	Tennessee	5,689,283	4,877,185	812,098	16.7
17	Missouri	5,595,211	5,117,073	478,138	9.3
18	Wisconsin	5,363,675	4,891,769	471,906	9.6
19	Maryland	5,296,486	4,781,468	515,018	10.8
20	Arizona	5,130,632	3,665,228	1,465,404	40.0
21	Minnesota	4,919,479	4,375,099	544,380	12.4
22	Louisiana	4,468,976	4,219,973	249,003	5.9
23	Alabama	4,447,100	4,040,587	406,513	10.1
24	Colorado	4,301,261	3,294,394	1,006,867	30.6
25	Kentucky	4,041,769	3,685,296	356,473	9.7
26	South Carolina	4,012,012	3,486,703	525,309	15.1
27	Oklahoma	3,450,654	3,145,585	305,069	9.7
28	Oregon	3,421,399	2,842,321	579,078	20.4
29	Connecticut	3,405,565	3,287,116	118,449	3.6
30	Iowa	2,926,324	2,776,755	149,569	5.4
31	Mississippi	2,844,658	2,573,216	271,442	10.5
32	Kansas	2,688,418	2,477,574	210,844	8.5
33	Arkansas	2,673,400	2,350,725	322,675	13.7
34	Utah	2,233,169	1,722,850	510,319	29.6
35	Nevada	1,998,257	1,201,833	796,424	66.3
36	New Mexico	1,819,046	1,515,069	303,977	20.1
37	West Virginia	1,808,344	1,793,477	14,867	0.8

38	Nebraska	1,711,263	1,578,385	132,878	8.4
39	Idaho	1,293,953	1,006,749	287,204	28.5
40	Maine	1,274,923	1,227,928	46,995	3.8
41	New Hampshire	1,235,786	1,109,252	126,534	11.4
42	Hawaii	1,211,537	1,108,229	103,308	9.3
43	Rhode Island	1,048,319	1,003,464	44,855	4.5
44	Montana	902,195	799,065	103,130	12.9
45	Delaware	783,600	666,168	117,432	17.6
46	South Dakota	754,844	696,004	58,840	8.5
47	North Dakota	642,200	638,800	3,400	0.5
48	Alaska	626,932	550,043	76,889	14.0
49	Vermont	608,827	562,758	46,069	8.2
(NA)	District of Columbia	572,059	606,900	-34,841	-5.7
50	Wyoming	493,782	453,588	40,194	8.9
(NA)	United States	281,421,906	248,709,873	32,712,033	13.2

Source: U.S. Census Bureau, Census 2000 Redistricting Data (P.L. 94-171) Summary File and 1990 Census.

## **Appendix C**

### **Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554**

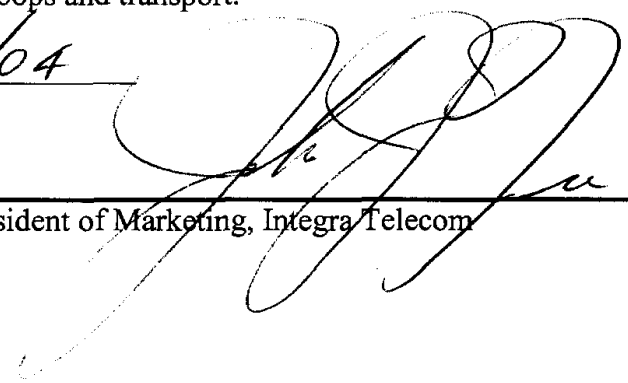
<b>In the Matter of</b>	)	<b>WC Docket</b>
<b>Unbundled Access to</b>	)	<b>No. 04-313</b>
<b>Network Elements</b>	)	
	)	
<b>Review of the</b>	)	
<b>Section 251 Unbundling Obligations</b>	)	<b>CC Docket</b>
<b>For Incumbent Local Exchange</b>	)	<b>No. 01-338</b>
<b>Carriers</b>	)	

#### **Affidavit of John Nee**

1. My name is John Nee. I am the Vice President of Marketing for Integra Telecom.
2. In my capacity as the Vice President of Marketing, I contracted with Riley Research Associates to conduct a statistically valid survey of businesses in Integra's target market. The purpose of the survey was to identify businesses that are within Integra's target market, with 96 or fewer access lines at one location, and ask them to identify their local exchange carrier. The survey was conducted in the five largest MSA's in which Integra does business: Portland/Vancouver, Seattle/Bellevue/Everett, Tacoma, Salt Lake City/Ogden, and Minneapolis/St. Paul. All business surveyed were located in rate centers in which Integra competes. The businesses were pulled at random by Riley, with a goal of having 400 complete surveys in each MSA. A total of 1,944 businesses responded to the survey. The methodology and results are attached as Exhibit A.
3. The following companies were identified by businesses as being a current local telephone service provider: Qwest, Integra, Verizon, AT&T, Eschelon, McLeod, Allegiance, Popp, ATG, Comcast, MCI, XO Communications, Sprint, US Link, Century Tel, ELI, and Tel West.
4. None of the carriers identified in the independent survey is a satellite or wireless provider. Only one cable company appears in the survey but it has a statistical insignificant market share, 1%, or 20 of 1,944 customers, 10 of whom were in the State of Washington. I reviewed Comcast's tariffs for the state of Washington (tariffs are not required to be filed by CLECs in the state of Oregon) and Comcast does not appear to have a tariffed business offering. Qwest, Verizon, and Century Tel are all ILECs. Every other local service provider is a wire-line CLEC or ILEC.

5. Also attached to my Affidavit is Exhibit B, a survey of customers who left Integra Telecom, conducted under my supervision and control. Each customer was selected randomly and asked to identify the carrier it went to upon leaving Integra Telecom. The carriers identified are Qwest, Eschelon, US Link, McLeod, Verizon, Integra, Popp, XO, and Allegiance. None of the companies identified in the internal survey is a cable, satellite, or wireless carrier. They are all telecom wire-line CLECs or ILECs.
6. Exhibit C to my affidavit is a chart showing the percentage of Integra's business customers with a certain number of access lines at one location. As the chart shows, 99.8% of Integra's retail business customers have fewer than 96 access lines at one location.
7. Exhibit D to my affidavit is a chart showing the number of companies in each of seven key markets that fall within the small to medium sized businesses targeted by Integra. The data is produced by Dunn & Bradstreet. The chart shows the total number of companies in a given market and the number of companies that have fewer than 100 access lines at one location. Business customers with fewer than 100 access lines at one location are Integra's target market. The chart allows the reader to understand that Integra's customer base is wide-spread, ubiquitous, with customer's literally located on every point of the ILEC network. Integra customers are not concentrated in large buildings or in new developments. For example, 94% of the businesses located in the Portland, OR/Vancouver, WA market area are potential Integra customers. To serve these customers, Integra needs access to all loops and transport in a given market, not just to selected loops and transport.

Dated: 9/30/04

  
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John Nee, Vice President of Marketing, Integra Telecom

## INTRODUCTION

In order to determine its current market share in the industry, compared to Qwest and other competitors, Integra Telecom asked Riley Research Associates to conduct a market study in five key Regions / MSA's.

Specifically, the project goal was to:

- ☑ Quantify current levels of market share across the industry
- ☑ Measure customer satisfaction levels across the industry to confirm previous indications that Integra is excelling in terms of service, compared to its competitors
- ☑ Measure market-wide awareness of Integra

## METHODOLOGY

Riley Research Associates, with input from Integra, designed the questionnaire and sampling plan to accomplish the above goal. The stratified sampling plan was designed to ensure a high level of accuracy on a regional basis. A total of 1,944 interviews were conducted, providing an overall margin-of-error of +/-2.2% at a 95% level of confidence. The five regions / MSA's were stratified as follows (at a 95% level of confidence):

Region / MSA	Sample	Margin-of-error
Portland-Vancouver, OR-WA	389	+/-4.97%
Seattle-Bellevue-Everett, WA	390	+/-4.96%
Tacoma, WA	387	+/-4.98%
Salt Lake City-Ogden, UT	389	+/-4.97%
Minneapolis / St. Paul, MN	389	+/-4.97%
Total	1,944	+/-2.20%

The sampling process began by limiting it geographically, based on the aforementioned MSA's. We then eliminated all area codes and prefixes in which Integra did not compete, based on its rate centers. From that universe of businesses, we randomly selected approximately 5,000 businesses per MSA, which subsequently became our call list.

All interviews were conducted in a "blind" fashion, meaning that respondents did not know on whose behalf we were calling. Fielding took place between August 3<sup>rd</sup> and August 13<sup>th</sup>, 2004. Interviewers spoke with respondents between 8:00 a.m. and 4:30 p.m., PDT.

The sample taken for this poll was representative of the overall market – 75% of businesses polled have fewer than 10 employees at their location and 77% have annual sales volumes of \$2.5 million or less.

A copy of the questionnaire follows the report in the Appendix, and cross tabulations are contained in a separate document. Only those differences between market subsegments found to be statistically significant are cited in the body of the report.

## RESULTS

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### Q1. First off, how many phone lines do you currently have at your location, including phone, fax, and DSL lines?

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When asked how many phone lines their business had at their location, respondents in Seattle provided the highest mean (9.3), followed by Minneapolis / St. Paul (8.0), Portland (7.4), Salt Lake City (5.9), and Tacoma (4.6).

If you examine the average (mean) number of lines per customer on a provider basis, you find that AT&T has the largest number of lines per customer (12.9), followed by Integra (6.4), Eschelon (6.2), Qwest (5.5), McLeod (4.2), and Verizon (3.9).

	<u>Portland</u>	<u>Seattle</u>	<u>Tacoma</u>	<u>Salt Lake</u>	<u>Minneapolis/ St. Paul</u>
Total Participants	389	390	387	389	389
1	18%	10%	18%	14%	16%
2	23	18	25	25	21
3	17	17	17	15	16
4	14	12	14	12	13
5	7	10	7	8	7
6	5	9	4	7	7
7-10	9	13	7	8	12
11-20	4	5	4	6	4
Over 20	3	5	2	4	3
Refused / No answer	-	1	1	0	-
Mean (lines)	7.4	9.3	4.6	5.9	8.0

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**Q2. Who is your current local telephone service provider? (Unaided)**

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In all five MSA's, Qwest was the dominant leader in terms of market share. Qwest's greatest dominance was in Tacoma, where 69% of respondents have Qwest's local service. On the low end, 40% of respondents in Portland said Qwest is their current local telephone service provider. Qwest's share in Salt Lake City, Seattle, and Minneapolis / St. Paul fell in-between these two MSA's (58%, 56% and 53%, respectively).

Integra came in second overall (tied with Verizon at 8%), with market share ranging from 2% in Tacoma to 14% in Portland. In Salt Lake, Integra's market share is 11%, followed by Minneapolis / St. Paul (7%) and Seattle (6%).

It is important to note that in each market there was at least one competitor (other than Qwest) that ranked higher than or equal to Integra in terms of market share (in some cases, within the margin-of-error of +/-5%). In Portland and Seattle, that competitor is Verizon, while in Salt Lake, it is AT&T, and in Minneapolis / St. Paul, it is McLeod. In Tacoma, there were four firms that were *at least* tied with Integra. In each case (other than Portland), there were a host of other firms, as well, that were within reach of Integra, based on the margin-of-error.

While Qwest was the dominant provider across all analyzed subsegments, it is interesting to note that larger companies, based on total number of phone lines, number of employees, and annual sales, tended for the most part, to be less likely than smaller companies to use Qwest. Integra, on the other hand, tended to be used more by larger companies (11+ phone lines, 10-49 employees, \$2.5 – 5 million / Over \$10 million in sales).

	<u>Portland</u>	<u>Seattle</u>	<u>Tacoma</u>	<u>Salt Lake</u>	<u>Minneapolis/ St. Paul</u>
Total Participants	389	390	387	389	389
Qwest	40%	56%	69%	58%	53%
Integra	14	6	2	11	7
Verizon	23	14	1	1	1
AT&T	5	5	10	11	4
Eschelon	5	4	6	2	6
McLeod	1	1	2	8	10
Allegiance	2	5	0	0	1
Pop	-	-	-	-	6
Advanced Telecom Group (ATG)	1	-	5	-	-
Comcast	1	1	1	1	2
Worldcom / MCI	2	0	1	1	1
XO Communications	0	2	-	1	0

(Continued)

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Q2. Who is your current local telephone service provider? (Continued)

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	<u>Portland</u>	<u>Seattle</u>	<u>Tacoma</u>	<u>Salt Lake</u>	<u>Minneapolis/ St. Paul</u>
Total Participants	389	390	387	389	389
Sprint	1	1	-	0	2
US Link	-	-	-	-	3
US West	1	0	1	1	-
CenturyTel	-	1	1	-	-
Electric Lightwave (ELI)	0	0	0	1	-
Tel West	-	1	0	-	-
Miscellaneous	4	2	2	3	4
Refused	1	1	-	1	1

# Current Provider

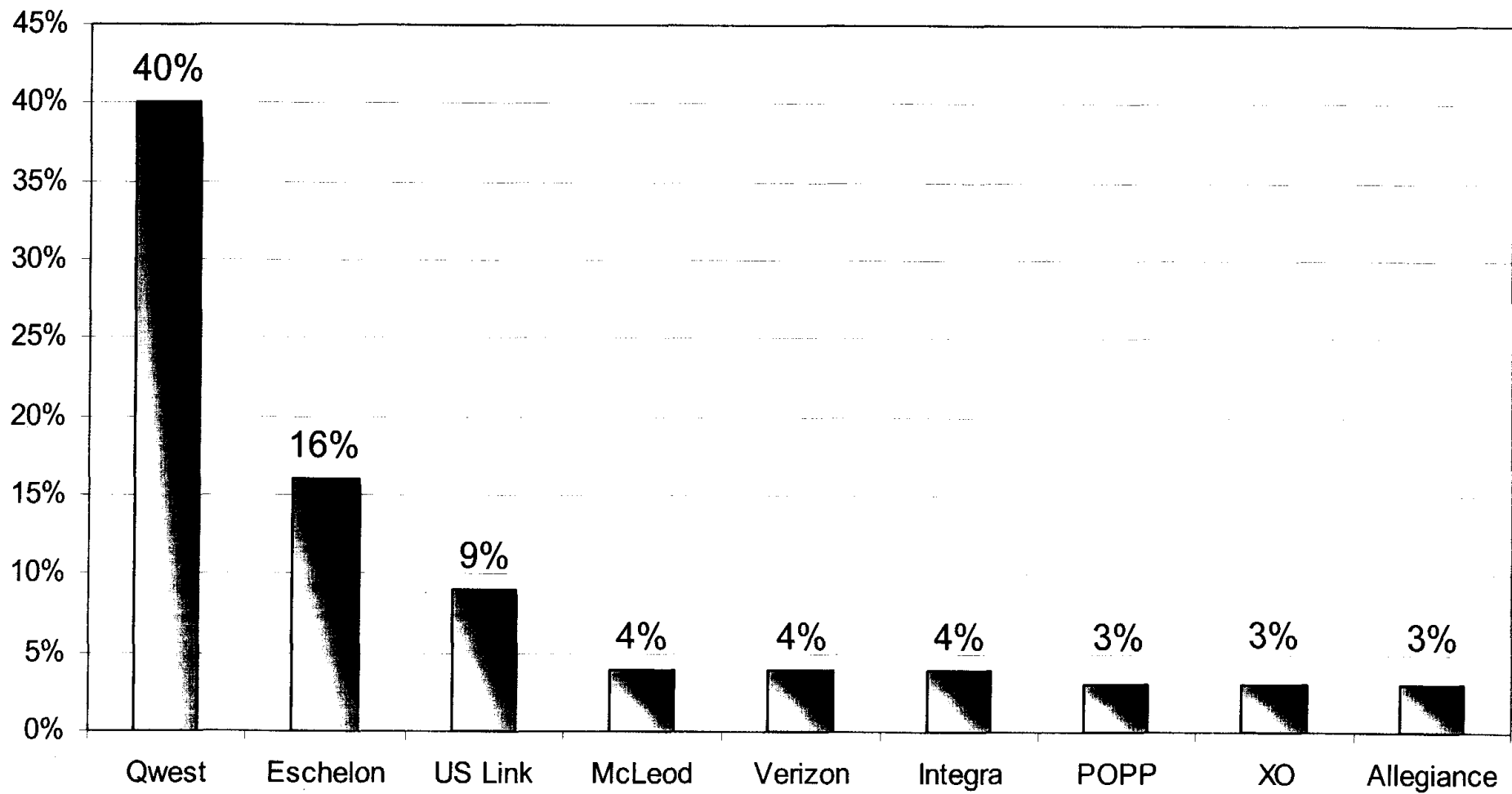


EXHIBIT C

	Total Business Locations	# that are under 24 ALEs	% that are under 24 ALEs	# that are 24 to 47 ALEs	% that are 24 to 47 ALEs	# that are 48 to 95 ALEs	% that are 48 to 95 ALEs	# that are 96 ALEs or greater	% that are 96 ALEs or greater
MN-N Market	2278	2175	95.4%	74	3.2%	67	2.9%	5	0.3%
MN-S Market	5870	5324	90.6%	453	7.7%	85	1.4%	8	0.1%
ND Market	1183	1162	98.2%	16	1.3%	4	0.3%	1	0.1%
OR OMA	9357	8716	93.1%	500	5.3%	122	1.3%	15	0.2%
WA OMA	3162	2777	87.8%	302	9.5%	76	2.4%	6	0.2%
UT OMA	3930	3750	95.4%	142	3.6%	34	0.8%	4	0.1%
<b>TOTAL</b>	<b>25780</b>	<b>23904</b>	<b>92.7%</b>	<b>1487</b>	<b>5.8%</b>	<b>388</b>	<b>1.5%</b>	<b>39</b>	<b>0.2%</b>

## Exhibit D to the Affidavit of John Nee

Region/MSA	Total companies	Companies with fewer than 100 access lines	Percentage of businesses falling within Integra's target market
Portland-Vancouver, OR-WA	96,287	90,183	94
Seattle-Bellevue- Everett, WA	134,875	127,265	94
Tacoma, WA	29,609	27,848	94
Salt Lake City-Ogden, UT	58,655	54,138	92
Minneapolis-St. Paul, MN	133,612	125,474	94
Grand Forks, ND, MN	5,054	4,836	96
Fargo-Moorhead, ND, MN	9,325	8,796	94

**Appendix D**

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

<b>In the Matter of</b>	)	<b>WC Docket</b>
<b>Unbundled Access to</b>	)	<b>No. 04-313</b>
<b>Network Elements</b>	)	
	)	
<b>Review of the</b>	)	
<b>Section 251 Unbundling Obligations</b>	)	<b>CC Docket</b>
<b>For Incumbent Local Exchange</b>	)	<b>No. 01-338</b>
<b>Carriers</b>	)	

**Affidavit of Bill Littler**

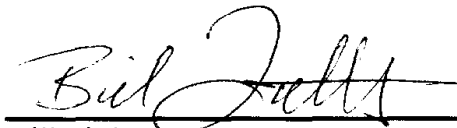
1. My name is Bill Littler. I am the Director of Carrier Services for Integra Telecom. I report to and work under the supervision of Dave Bennett, Vice President of Network Planning.
2. I have been employed by Integra Telecom for four years, ten months. Prior to my employment with Integra, I was with ELI for three years. Prior to my employment with ELI, I was with MCI for five years. I have a total of thirteen years of experience in the Telecom industry.
3. I was responsible for collecting information about the availability of loops and transport from Integra's competitors and from CAP providers. Some of the information I obtained by contacting companies by telephone; some of the information I obtained pursuant to signed Non-Disclosure Agreements, meaning that I can only refer to it generally in this affidavit. I attempt to be as specific as possible while fully complying with the Non-Disclosure Agreements. Of the 23 carriers about whom I compiled information, Integra has signed Non-disclosure Agreements with at least 18. Therefore, I am severely limited in the level of detail I can disclose about other carrier's networks.
4. I prepared the chart attached as Exhibit A to my affidavit based on a combination of telephone contacts and general industry information. The chart addresses every company identified in either the independent or internal surveys, in the analysis of Integra's largest customers, or in the service technician surveys. XO includes Allegiance because XO bought Allegiance's assets out of bankruptcy.

5. No company other than Qwest and Verizon have loops available to the entire Integra customer base. The loops from companies claiming to have loops available for wholesale lease share two characteristics: first, the loops are all connected to specific large customers or large buildings, not to the general customer base that Integra serves. Second, none of the loops connect with the ILEC central offices where Integra needs collocation. All of the loops connect to the provider's network, which means the loops is very different from an ILEC loop and not a competitive product.
6. Clicks Network is owned by the City of Tacoma, Washington. The loops it has connect only a small fraction of the total buildings in Tacoma.
7. It is also important to understand the financial characteristics of some of these companies. Table 1 shows the companies that can claim to have provisioned loops or transport, but also ended up filing for bankruptcy or experiencing other types of financial difficulty. The companies that did not experience financial difficulty are owned by ILECs, municipalities, or electric power companies.

Table 1

Name of company with self-provisioned loops or transport.	File for bankruptcy, do financial re-organization, or propped up by a parent company?
SHAL	No, ILEC owned
XO	Yes
Onvoy	No, ILEC owned
Clicks Network	No, owned by municipality
GST/Time Warner	Yes, GST pre-TW
ELI	Yes, parent propped
MCI	Yes, bankruptcy
Onvoy	No, ILEC owned
Winstar	Yes
Eventis	No, owned by electric power company
McLeod	Yes, bankruptcy
Astound	No, owned by electric power company
Eschelon	Yes, financial reorganization

Dated:



Bill Littler

Director of Carrier Services

**Exhibit A - Littler Affidavit**

[illegible]

## **Appendix E**

### **Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554**

<b>In the Matter of</b>	)	<b>WC Docket</b>
<b>Unbundled Access to</b>	)	<b>No. 04-313</b>
<b>Network Elements</b>	)	
	)	
<b>Review of the</b>	)	
<b>Section 251 Unbundling Obligations</b>	)	<b>CC Docket</b>
<b>For Incumbent Local Exchange</b>	)	<b>No. 01-338</b>
<b>Carriers</b>	)	

#### **Affidavit of Dave Bennett**

#### **Background**

1. My name is Dave Bennett. I am employed by Integra Telecom as the Vice President of Network Planning.
2. I have worked in the telecommunications industry for over 34 years. I joined Integra as Vice President of Operations for the Oregon Market Area in December 1999. In November 2000, I transitioned into my current position. Prior to joining Integra, I was the Regional Manager, Operations with CenturyTel, responsible for overseeing 400,000 access lines in ten states. Prior to that, I was the Regional Manager of Engineering with CenturyTel. Before joining CenturyTel, I was the Corporate Manager of Engineering with Pacific Telecom, Inc.
3. As the Vice President of Network Planning, I am responsible for the design, construction, purchasing, and engineering of the network used by the company to provide voice, data, and all other services. I am also responsible for purchasing all loops and transport, whether unbundled network elements, special access, or from an alternate provider.
4. I must be careful when discussing the network designs of other carriers. When a carrier shares network design information, it requires me to sign a Non-disclosure Agreement. Those agreements preclude me from sharing any information with people outside of Integra. I cannot put information in an affidavit that is subject to a Non-disclosure Agreement. Therefore, I am limited in what I can say on certain subjects. Bill Littler, who works for me as the Director of Carrier Services, is likewise limited.

#### **Customer base**

5. Integra's target market is the small to medium sized business customer. The average Integra customer has eight access lines, generating less than \$400 per month in revenue. The customer typically has no in-house telecom expertise and is not considered a sophisticated purchaser of telecom services. Integra customers are served with an almost even mix of DS-0 and DS-1 lines: 44% DS-1, 56% DS-0.
6. Appendix B is a listing and ranking of MSAs depicting the service areas in which Integra currently does business. These areas generally include the following major cities and their surrounding areas: Portland, Eugene, McMinnville, and Salem in Oregon; Seattle, Tacoma, Everett and Vancouver in Washington; Salt Lake City, Ogden, Park City, and Provo in Utah; Minneapolis, St. Paul, Brainerd, Nisswa, Baxter, Little Falls, Moorhead, Duluth and St. Cloud in Minnesota; Fargo and Grand Forks in North Dakota.

#### **Loop Impairment Analysis: Survey of Businesses**

7. As part of identifying potential alternate providers of loops and transport, Integra retained the services of an independent vendor to conduct a survey of businesses in our target market. A copy of the survey protocol and questions asked is found in Appendix C, the Affidavit of John Nee. The target group was businesses with fewer than 96 access lines at one location, located in the geographic areas in which Integra does business, the areas generally described in Appendix B. Each business was asked to identify its current provider of local exchange services. The identity of each provider was recorded and tabulated. See Appendix C.
8. Bill Littler gathered information about each local exchange carrier identified in the surveys. See Appendix D, Affidavit of Bill Littler. None of the carriers identified as active in Integra's target market is a wireless or satellite provider. See Appendix C.

#### **Loop Impairment: Analysis of the top 100: the 25 largest customers in each geographic area.**

9. I was responsible for the survey that analyzed the demarcation points for the company's 25 largest customers in each of four geographic markets. The twenty-five largest customers in Minnesota/North Dakota, Oregon, Washington, and Utah were examined. The purpose was to determine how many of Integra's largest customers have more than one loop coming to their premises. 99.8% of Integra's customers have fewer than 96 access lines at any one location. See Exhibit C to Appendix C, Affidavit of John Nee. A direct observation of every customer demarcation point would be the ideal way to make this determination. Because that is virtually impossible, we focused on 100 large customers, the twenty-five largest in each market.
10. Integra's largest twenty-five retail customers in each market are less than four-tenths of 1% of Integra's total customer base--0.00389. The largest customer has 408 access lines at one location. The average number of access lines for this customer group is 95. The average number of access lines for all Integra business customers is 8. This means that the vast majority of Integra customers use dramatically fewer access lines than the 100

largest customers. If a majority of customers with 95 access lines do not have alternate provider loops, it follows that customers with only 8 access lines also do not have alternate loops.

11. In the state of Washington, only two of the 25 largest customers had a loop from a non-ILEC. The companies with demarks at these two customers are ELI and MCI at one and Click Networks at the other. The customer with the Click Networks loop has 408 access lines at one location.
12. The remaining 23 largest customers in the state of Washington, with an average of 97 access lines per location, have only the ILEC loop running to their premises.
13. In the state of Oregon, none of the 25 largest customers, with an average of 110 loops at one location, had loops provisioned by an alternate provider. Pre-Telecom Act of 1996, the Oregon Graduate Institute provisioned loops for connecting its buildings with its PBX. The founders of Integra acquired the Oregon Graduate Institute's telecom service so the loops installed by the Institute to serve its own needs pre-1996 show up today as Integra loops. These pre-Telecom Act loops provisioned by a customer to serve its own needs are not the type of loops under scrutiny in an impairment analysis. Integra only identifies this issue in the interest of full disclosure.
14. In the state of Utah, only 3 of the 25 largest customers had loops from an alternate provider. All three were ELI, a company that was propped up by a parent company. None of the other 22 customers, with an average of 67 access lines per location, had alternate provider loops.
15. In the state of Minnesota/North Dakota, only 6 of the 25 largest customers had loops from an alternate provider. The remaining 19 customers, with an average of 76 access lines per location, have only the ILEC loop running to their premises.
16. Only 11 customers had more than the ILEC loop to their premises. The providers of these loops were identified as ELI, Click Networks, MCI, Winstar, GST/Time-Warner, Eventis, SHAL, Fibernet, Integra and Onvoy. If 89% of Integra's 100 largest customers, averaging 95 access lines per location, do not have multiple loops, it is fair to conclude that the remaining customer base, averaging 8 access lines per location, also do not have multiple loops.

#### **Survey of demarks by service technicians**

17. I was also responsible for collecting and analyzing the data from the service technicians during their one week of observing demarks at customer installs and service work. A total of 188 demarks were visited, with only 6 non-ILEC loops observed. This means that 97% of our randomly chosen customers had only the ILEC loop to their premises. Three of those loops were provisioned by XO in the state of Utah; two by ELI, one each in Washington and Oregon; 1 by GST/Time Warner in Oregon.

**Loop Impairment Analysis: There are no competitive loops because alternate provider loops are entirely different products than ILEC loops.**

18. Integra is in existence to make money. The decisions I make about what I purchase or what I lease are made with a focus on profit. If I can buy loops or transport at better prices than ILEC loops and transport, I do so. However, the loops and transport available from alternative suppliers are not truly competitive with ILEC loops and transport. They are really different products, initially designed to accomplish different objectives, resulting in pricing schemes that make one far more expensive than the other and prevent them from being truly competitive.
19. Exhibit A to my affidavit is a diagram depicting the typical Qwest/Verizon loop and the typical alternate provider loop. I made this diagram based on my experience with the system designs of Qwest, Verizon, and alternate suppliers in general.
20. This diagram shows why alternate loops are not competitive with ILEC loops. ILEC loops were designed and installed over a period in history when the ILECs were monopoly providers, operating under rate of return regulation. Under rate of return regulation, ILECs recovered all dollars spent on capital improvements like the installation of loops, plus a percentage recovery above the capital dollars. This meant that ILECs had incentive to spend capital dollars, to make infrastructure improvements. These loops connect **ALL** customers within a geographic area to the ILEC switch.
21. When Integra made its sunk investment in hundreds of millions of capital equipment and infrastructure beginning eight years ago, it did so based on the law and interconnection agreements which established the points of entry or connection to the ILEC's network. Integra installed equipment to serve customers within specific geographic areas, based usually on a dark fiber ring configuration that uses ILEC transport to connect the ILEC central offices in which Integra has collocated equipment to serve customers with Integra's hub, and uses ILEC loops to connect with retail customers. Integra's equipment is located in leased collocation space within Qwest and Verizon wire centers. In other words, Integra's network was built to use the ILEC's feeder/distribution network to connect our switches to our hub and to retail customers.
22. A Verizon or Qwest loop connects the wire center directly to the customer premise. The price is "Flat Rated", depending upon the zone.
23. Alternative provider loops were designed and installed during a completely different period of time. These loops were all installed within the recent past. For the companies that installed these loops, there was no guaranteed recovery, no monopoly status. To the contrary, efficiency was a valued commodity. Unlike the ILEC network that was built to serve ALL customers in a large geographic area, the alternative provider loop was designed to serve select, targeted, large customers. The alternative provider loop connects that large customer to the alternative provider's hub, not to the ILEC's network.
24. Another issue is the quantity of loops that are available from alternate providers. Another anonymous ATP has 101 buildings connected to it's network in the **entire** greater Seattle area (Seattle, Bellevue, Everett, and Tacoma). This is the largest foot-print of any ATP

Integra is aware of. According to information from Qwest's ICON Database, in the 13 collocations served by Integra in Qwest's operating area, there are 1,131,077 business loops available. John Nee's Exhibit D to Appendix C provides information from Dunn & Bradstreet that shows 94% of business loops are in Integra's segment of the market (small to medium sized businesses). This equates to 1,063,212 loops available to Integra as potential customers through Qwest. The 101 buildings with loops from the ATP with the largest footprint in the Seattle area represent .0095% (95/10,000's of 1%) of all potential Integra customers in the greater Seattle area, customers for which the ILEC has a loop running to each one. A company with only 95/10,000's of 1 % of the loops in a geographical area is not competitive with an ILEC that has 100%.

25. Integra's business plan and network configuration is based on interconnecting with the ILEC's network in order to serve as many customers as possible in a large geographic area. This is significantly different from an alternative provider network that is intended to only serve specific, large customers.
26. Because the alternative provider's network configuration is different, the cost is different as well. Alternative provider costs are distance sensitive, meaning they increase with distance. As Exhibit A shows, the alternative provider loop is necessarily significantly longer than the ILEC loop. With distance sensitive pricing, this means the alternative provider loop will always be significantly more expensive than the ILEC loop.
27. Integra has located its equipment within ILEC wire centers to serve a broad base of customers. If alternative provider loops do not terminate within those wire centers, they are not competitive with ILEC loops. Either duplicate equipment must be installed by Integra within the alternate provider's location or additional cross-connects or tie cable and transport are required to connect Integra's equipment located in the ILEC wire centers to the point in the alternate provider's network where access to the loop can be obtained. This translates into additional cost for equipment, space, and power, and additional facility length, which affects transmission characteristics and cost.
28. I cannot justify paying significantly more money for a loop from an alternative provider. There is no additional value or benefit to Integra from spending the additional money. Therefore, it makes no sense to say that loops from alternative providers are a competitive alternative to ILEC loops. They are not.

#### **Loop Impairment Analysis: Self-provisioning loops**

29. It is my responsibility to analyze the costs and benefits of provisioning infrastructure, comparing that analysis with the purchase of unbundled network elements. The average customer base served by Integra does not justify the investment necessary to provision loops.
30. Essentially, to self-provision loops, a CLEC would have to completely replicate the ILEC network. Building loops is about much more than just the loop: the loop is just one part of the design. The loop must then be connected to the network, to the nearest central office. The CLEC would literally have to build the same tree and branch design (feeder and distribution), following the same streets to the same premises as the ILEC.

Of course, the ILEC built its system with a 100% market share under a rate of return regulatory scheme where it was guaranteed recovery of every dollar spent plus a double-digit profit. CLECs have no such market share and no such guarantee of cost recovery. With an average market share of 10%, and an average customer generating a revenue stream of less than \$400 per month, Integra cannot possibly duplicate the ILEC network.

**Loop Impairment Analysis: Special Access as an alternative to ILEC loops**

31. Special Access is a pricing methodology, not a product. The actual facility used to provide the underlying service is the same for both ILEC special access and ILEC unbundled network elements. Special Access is not an economically viable alternative to unbundled loops at TELRIC.
32. If Integra were forced to move all EEL and loop costs to special access prices, the economic impact would destroy the company. Today, Integra pays ILECs approximately \$.5 million each month for DS-1 loops and DS-1 EELs. At special access prices, this amount jumps to \$1.1 million each month, a 220 % increase. This increase turns a profit making company into an insolvent company.
33. Special access pricing will never be an economically viable or adequate substitute for ILEC unbundled network elements because Integra's business plan is based on TELRIC pricing. The company relied on the FCC's determination that TELRIC pricing would be used for unbundled network elements. The design of our network and the specifics of our business plan rely on TELRIC and its continuation.
34. The only time I would purchase loops at special access rates is if EELs or other unbundled network elements are unavailable for some reason. Those reasons may include the crossing of a LATA boundary, the crossing of a state boundary, or the crossing of a rate center boundary. I only make these purchases because I have to in order to serve a specific customer. Special access is not an adequate substitute for unbundled network elements at TELRIC pricing.
35. During the period 1996, the beginning of competition, until January 2002, Verizon's computer systems were unable to bill for unbundled network elements. When Integra purchased unbundled network elements from Verizon, Verizon sent a bill for special access, then discounted the bill by 80% for all UNE products to approximate UNE rates. See bills marked as Exhibit C to this Affidavit. This means, for example, that a \$100 special access loop was actually billed at \$20 to approximate UNE rates. The percentage increase from \$20 to \$100 is 500. Verizon's own real-life bills demonstrate that special access rates are a 500% increase over UNE rates.
36. To say or imply that companies like Integra were purchasing from special access is misleading at best. Other companies undoubtedly have their own stories. Integra was purchasing unbundled network elements and it took Verizon six years to configure its billing systems so it could bill for UNEs. Integra did not purchase special access; it

purchased unbundled network elements from a company that took six years to fix its computer systems.

**Transport Impairment Analysis: a three-step methodology**

37. The Transport impairment analysis was conducted under my direction and control. We carried out our analysis as a three-step process. I will describe each of the steps.
38. The first step was to contact each of the Competitive Access Providers (CAPs) operating within the same market area as Integra. We identified the CAPs by using the independent and internal surveys and our own knowledge of the local markets.
39. We then surveyed each of the companies to determine if they own transport/dark fiber facilities; if so, which ILEC collocations their facilities connect; and if they are willing to lease those facilities to competitors. If they are willing to lease the facilities, we asked about the terms, conditions, and prices.
40. The carrier contact was made by Bill Littler, the Director of Carrier Services, who reports to me. The results of what Mr. Littler learned are found in his affidavit, Appendix D.
41. The most important thing we learned from the CAPs is that none of them has transport/dark fiber facilities that can be considered competitive products with the ILEC transport/dark fiber. None of them can be considered competitive because none of them was designed to connect all of the ILEC central offices that are important to Integra's business plan. The transport installed by these CAPs was installed to connect a large customer to the CAPs hub facilities, not to connect ALL of the ILEC central offices to Integra's hub location. Integra needs connections to ILEC central offices, not to CAP hubs. CAPs deliberately by-passed the majority of the very central offices to which we need to interconnect.
42. Integra's business plan is based on a network configuration that interconnects with the ILEC network at carefully chosen, negotiated points of access. Integra installs its own switch in a Market Area, uses ILEC dark fiber to create a ring that connects the ILEC central offices with Integra's hub, installs equipment in the ILEC central offices, and uses the ILEC loops to connect with retail customers. All of Integra's investments in infrastructure have been made with this design in mind. To compete with ILEC transport, CAP transport must mirror this design. It must connect ILEC central offices where Integra is collocated with Integra's hub in a ring configuration.
43. The ILEC network design and the CAP network design are two entirely different models, designed for entirely different purposes. The CAP network design was never intended to connect with ILEC central offices so ILEC loops could be used to connect with retail customers. CAPS took an entirely different approach to network design.
44. CAPS made a deliberate decision to by-pass most ILEC central offices and not use ILEC loops to connect with customers. Instead, CAPS built networks directly to very large selected customers or locations where it could reasonably be anticipated that large

numbers of customers might someday exist, like major office buildings and airports. Facilities were run from the CAPS hub directly to large customer premises. A few ILEC central offices are connected but these connections were all made very strategically, depending entirely upon connecting with a retail customer.

45. For example, Integra is collocated in 12 Qwest central offices in the Seattle, Redmond, Tacoma area. A CAP that has the largest foot-print that we could find, who must remain anonymous because of Non-disclosure Agreements, has some transport in this same area. However, the CAP only has transport connecting 5 of the 12 central offices in which Integra is collocated. This CAP does not have facilities that Integra can use to duplicate any of the 4 dark fiber rings Integra has in the greater Seattle area. This CAP has the broadest footprint of connections to ILEC central offices of all the CAP's surveyed.
46. This transport product is not competitive with ILEC transport because it does not connect ALL the central offices in which Integra is collocated. It cannot replicate the ring configuration that is essential to Integra's network design. Without these rings, Integra has no means to connect all 12 ILEC central offices where Integra serves customers today.
47. Exhibit B to this Affidavit illustrates the differences between Integra's ring configurations using ILEC dark fiber and the offering of an anonymous alternate transport provider. Exhibit B has two pages: the first page shows Integra's existing network design and depicts four different ring configurations connecting various Qwest central offices using Qwest dark fiber. This is the design of Integra's network as it exists today. This is the design and configuration that an alternate transport provider must replicate in order to have a competitive product.
48. The second page of Exhibit B shows the routes the anonymous alternate transport provider has available in the Seattle, Redmond, Tacoma area. As you can see, the alternate provider routes do not even come close to duplicating any of Integra's four ring configurations. The four ring configurations have a total of approximately 12 routes. Of those 12 routes, the alternate provider has transport on only 4 of them, connecting 5 ILEC central offices. Connecting with central offices was simply not an important feature of the CAP network design.
50. Close is not good enough when it comes to transport and dark fiber. Running somewhere in the vicinity of an ILEC collocation is not good enough; running through the manhole a block away is not good enough. Integra must have transport facilities that originate and terminate in all ILEC central offices in which Integra is collocated on a given ring configuration. Forcing Integra to use multiple transport providers on a single ring configuration causes all kinds of problems with who to call when problems arise, who is responsible for maintenance issues, multiple billing issues, and added transaction costs in dealing with multiple providers that significantly increase the cost of transport. This is the very issue that the FCC recognized when it discussed the inherent problems with different links from multiple carriers to complete a route.
51. Because CAP transport/dark fiber is a different product, it also has a significantly different price. The CAP transport/dark fiber is significantly more expensive than ILEC

transport or dark fiber because it is priced on a distance sensitive basis, and the design of the CAP network means that the transport/dark fiber is significantly longer than the ILEC transport.

For Integra to utilize the 5 routes indicated above, the cost for additional fiber would be \$53,000 more per month (over a 500% increase). Integra's Fiber Optic equipment would not work in this configuration due to the additional 115 miles in length of the fiber route without installation of repeaters. This scenario would still require Integra to utilize ILEC fiber to connect the remaining collocations. Integra has attempted to negotiate a commercial agreement with one of the two ILEC's in our service territory to determine what the cost for dark fiber would be if the un-bundling requirement were to be removed but the ILEC has refused to negotiate on any item other than UNE-P. In addition to the technical challenges and costs associated with significantly increasing the transport mileage, the additional mileage increases the potential for service interruptions.

52. I have purchased CAP transport when ILEC transport is not available, or when CAP transport is more economical than ILEC transport.
53. The second step of our transport/dark fiber impairment analysis was to contact each CLEC operating within the same market areas as Integra. Each CLEC was asked if it owned transport or dark fiber facilities. If the answer was in the affirmative, we asked which ILEC collocations their facilities connected. We also asked if the facilities were available for lease and, if so, under what terms, condition, and prices.
54. Mr. Littler conducted this questioning. The results are found in his affidavit, Appendix D. Some of the CLECs own transport or dark fiber for lease. This transport or dark fiber connects only a few ILEC central offices. This does not surprise me because Integra has found it necessary to take the same approach to transport as these CLECS: we installed transport necessary to connect our hub to the nearest ILEC central office. Beyond that connection, we could not make a business case for installing transport.
55. Our third step was to contact both Qwest and Verizon and ask for information on the availability of competitive access providers whose facilities terminate in their central offices. As you can see from Mr. Littler's affidavit, Appendix D, neither Qwest nor Verizon had any information to share with us any different from what we already knew from steps one and two.
56. We have leased many miles of dark fiber from Qwest. When we lease dark fiber from an ILEC, we must invest millions of dollars in optronic equipment that lights the fiber. This is not an investment made by the ILEC, this investment is made by Integra. So, for each pair of dark fiber leased, Integra has invested in the equipment to light it up. If this dark fiber is taken away from Integra, and replaced with supposedly competitive lit fiber, we will have a stranded investment of all of the optic equipment we purchased to light the dark fiber. If this dark fiber is replaced with competitive dark fiber, Integra will also have some stranded optronics as the existing equipment is serving customers today. It cannot be simply turned down and re-deployed on new fiber. That would put our customer base out of service. The cutover process to migrate to another company's dark fiber is a dangerous undertaking. That cutover would have the potential to adversely

affect every customer Integra serves. As of today, that investment totals approximately \$5 million.

**Integra cannot make a business case for self-provisioning transport**

57. The TRO has an extensive record on the impossibility of CLECs duplicating the ILEC transport and dark fiber network. At this point in the development of the marketplace, the cost of installing transport cannot be justified by the existing or short-term potential revenue streams. Over time, Integra will hopefully build a customer mass that overcomes these economic and operational barriers and justifies an investment in transport. Today, we are simply not even close.
58. The average Integra customer generates less than \$400 per month in revenue. Dark fiber transport construction costs an average of \$60,000 per mile in rural areas, and \$350,000 per mile in urban areas. Suppose Integra were to self-provision all of the transport it uses in the Seattle area. The Seattle area is a mix of very urban and suburban areas. As a result, consider that the average construction cost per mile of fiber based on the ILEC central offices Integra would need to connect is approximately \$271,000. Integra uses approximately 192 miles of transport in Seattle. Total cost to build transport: approximately \$52 million.
59. To justify an expenditure of \$52 million to duplicate ILEC transport in Seattle, Integra would have to have the same market conditions that the ILEC had when it built the transport: a 100 percent market share and guaranteed cost recovery plus a profit. A 10% market share based on customers generating an average monthly revenue stream of less than \$400 does not make self-provisioning transport an economically viable alternative. Appendix E, Affidavit of Dave Bennett.

**Application of the TRO standards to Transport**

60. Based on Integra's survey information, there are no routes used by Integra where three or more carriers have self-provisioned transport. Integra also does not have any routes with two or more wholesale transport providers, immediately capable and willing to provide transport at a specific capacity along a give route between ILEC switches or wire centers. Therefore, Integra continues to be impaired under the transport standards established in the TRO.

**Special access transport is not a substitute for ILEC transport**

61. If Integra were forced to move all transport costs from TELRIC pricing to special access pricing, the economic impact would destroy the company. Today, Integra pays ILECs approximately \$140,000 per month for UNE transport. At special access prices, transport costs jump to \$880,000 per month, over a 600% increase. Given that Integra's entire business plan and pricing is based on TELRIC pricing, special access is not even close to an adequate substitute.

**DS-1, DS-3, and Dark Fiber Transport are all critical to Integra's success.**

62. Integra is impaired without access to DS-1, DS-3 and dark fiber transport.
63. Integra's business plan and product pricing was built around access to DS-1, DS-3 and dark fiber transport. Today, dark fiber is the primary method of connecting central offices in which Integra is collocated with Qwest and Verizon. Some DS-1s and DS-3s are used when dark fiber is not available, and Integra has made extensive use of DS-3s. DS-1s are used extensively as trunking to connect tandems and end offices or to extend facilities to serve customers in an ILEC central office where Integra is not physically collocated. See affidavit of Dave Bennett, Appendix E.
64. The differences in pricing between DS-1s, DS-3s, and dark fiber are what have the potential to devastate Integra. Here is an example that illustrates the pricing impacts:
65. First, it is important to understand how the different products relate to each other. A DS-0 is the smallest capacity product. This is a single copper pair, or equivalent, the type typically used to serve a residential customer. A DS-1 is next on the hierarchy, consisting of 24 DS-0s. DS-3 is next, consisting of 28 DS-1s, or 672 DS-0s (24x28). Dark fiber is unlit fiber. When it is lit, it is referenced with the letters "OC". Depending upon the type of optronic equipment used to lite it, dark fiber can be lit at a capacity along a spectrum from OC-3 to OC-12 to OC-48, or even OC-192. The alphabetical reference of OC indicates optical; the numeric reference of 3 or 12 or 48 or 192 indicates the number of DS-3s. So, for example, OC-48 has the same capacity as 48 DS-3s, or 1,344 DS-1s (48x28).
66. Why does Integra use one product rather than another? This is where capacity and pricing come together. A certain amount of capacity is needed on a given route. The average DS-1 in Oregon from Qwest costs about \$42. The average DS-3 costs about \$333 (assumes \$253 plus a mileage charge for an 8 mile route, which adds about \$80). This means that it is the most cost effective for Integra to use up to 7 DS-1s on a route, rather than purchase a DS-3 (7 DS-1s times \$42 equals \$294). Once the capacity need increases to where 8 DS-1s are needed, it makes economic sense for Integra to purchase a DS-3 (8 DS-1s times \$42 equals \$336 vs. \$333 for a DS-3).
67. Now, a DS-3 is equal to 28 DS-1s. So, once it makes economic sense for Integra to go to a DS-3, it now has the capacity of 28 DS-1s.
68. If the FCC were to take DS-3s away from Integra, leaving it only with DS-1s, the economic impact is devastating.
69. Continuing with the example: for \$333, Integra gets a DS-3, with the capacity of 28 DS-1s. The cost of 28 DS-1s, if purchased as DS-1s rather than as DS-3s, is approximately 28x\$42 or \$1,176. This number is almost 400% higher than purchasing a DS-3. This impact would be economically devastating to Integra.